

LIST OF SPECIES

<i>Osmunda regalis</i>	<i>Rumex crispus</i>
<i>Dryopteris thelypteris</i>	<i>Polygonum prolificum</i>
<i>Lorinseria areolata</i>	<i>Persicaria hydropiperoides</i>
<i>Pinus taeda</i>	<i>Persicaria punctata</i>
<i>Chamaecyparis thyoides</i>	<i>Salsola kali</i>
<i>Ruppia maritima</i>	<i>Cerastium vulgatum</i>
<i>Agrostis hyemalis</i>	<i>Sagina decumbens</i>
<i>Ammophila arenaria</i>	<i>Ranunculus sceleratus</i>
<i>Capriola dactylon</i>	<i>Lepidium virginicum</i>
<i>Poa pratensis</i>	<i>Potentilla monspeliensis</i>
<i>Festuca octoflora</i>	<i>Rubus cuneifolius</i>
<i>Festuca myuros</i>	<i>Crataegus crus-galli</i>
<i>Scirpus americanus</i>	<i>Padus virginiana (serotina)</i>
<i>Carex straminea</i>	<i>Trifolium dubium</i>
<i>Juncus dichotomus</i>	<i>Trifolium arvense</i>
<i>Smilax rotundifolia</i>	<i>Linum usitatissimum</i>
<i>Iris versicolor</i>	<i>Toxicodendron radicans</i>
<i>Sisyrinchium angustifolium</i>	<i>Acer rubrum</i>
<i>Myrica carolinensis</i>	<i>Vitis labrusca</i>
<i>Rumex hastatulus</i>	<i>Parthenocissus quinquefolia</i>
<i>Hibiscus Moscheutos</i>	<i>Cynthia virginica</i>
<i>Viola primifolia</i>	<i>Leontodon taraxacum</i>
<i>Opuntia Opuntia</i>	<i>Ambrosia elatior</i>
<i>Raimannia humifusa</i>	<i>Solidago sempervirens</i>
<i>Asclepias incarnata</i>	<i>Baccharis halimifolia</i>
<i>Convolvulus Sepium</i>	<i>Antennaria plantaginifolia</i>
<i>Bignonia radicans</i>	<i>Senecio tomentosus</i>
<i>Plantago virginica</i>	<i>Cirsium horridulum</i>

NOTES ON SOUTHERN WOODY PLANTS

BY W. W. ASHE

Vaccinium Margarettae sp. nov. A shrub forming large patches by means of underground stems; branches 4-6 dm. high, the numerous short spreading or nearly horizontal branchlets crowded at their summits. Season's twig soft pubescent, gla-

brous the second year. Leaves deciduous, oblong or narrowly oblong, rarely obovate, obtuse or acute at each end, 2 to 3.5 cm. long, 0.7 to 1.8 cm. wide, grayish green as they unfold, dark green when mature, turning dark crimson after frost, permanently soft gray pubescent beneath, entire, apiculate, sessile or nearly so. Racemes, axillary or terminating the short branchlets, 1 to 2.5 cm. long, 4- to 7-flowered, pubescent. Flowers appearing the last week in April or early in May, when the leaves are about one half grown, cylindrical, 7-8 mm. long, pale greenish-yellow, striped especially in the bud with red, nodding on short pedicels; calyx lobes short, turning red after corolla falls. Fruit black and shining, about 6 mm. thick, ripens in July after that of *V. vacillans* Sol. Flowers appear 10 days after those of *V. vacillans*, with which it grows in rosemary, pine, and mixed oak woodland at altitudes of 450-600 m. in the mountains of Georgia and South Carolina where locally abundant. W. W. A., Oconee Co., S. C., May, 1912; Rabun Co., Ga., July, 1912; May 10, 1917; October 1, 1917. Representative specimens are deposited in U. S. National Herbarium; Field Columbian Museum; Charleston, S. C., Museum; Pittsburgh Museum; and Herbarium of Columbia University.

I have recently (Bul. Charl. Mus. 13:26, April, 1917) noted that the name *Quercus pagoda* Raf.* should replace that of *Q. pagodaefolia* (Ell.) Ashe.† A change also seems necessary in the case of the combination *Quercus hybrida* which I lately discussed (Proc. Soc. Am. For. 11, 1, 89, 1916) as referring to the oak described by Michaux (Ch. 10, pl. 18, 1801) in case this form is held as of specific rank, which in my opinion it should be. The correct name of this tree appears to be:

***Quercus obtusa* (Willd.) n. comb.**

The synonymy is as follows:

- Q. laurifolia hybrida* Mx. Ch. 10, pl. 18 (1801), not *Q. hybrida*
Houba Chên. L' Am. Sept. 200 t. (1887).
Q. laurifolia B. obtusa Willd. Sp. Pl. 4, p. 1, 428 (1809).

* Alsogr. Am. 23 (1838).

† N. C. Handbook (1896).

Q. aquatica y elongata Ait. Hort. Kew. Ed. 2, 5, 290 (1813),
not *Q. elongata* Willd. Nov. Act. Soc. Scrut. Borol. 3: 400.
1801.

Q. laurina Raf. Als. Am. (1838), not *Q. laurina* Humb. & Bonp.
Pl. Aeq. 2, 32 (1809).

It is doubtful whether Aiton's *Q. aquatica y elongata* should be included in this synonymy since the plate to which he refers (Ab. Ins. Ga. tab. 59) clearly represents a not unusual form of *Q. nigra* individual trees of which occasionally bear, sometimes exclusively, such foliage in place of the usual spatulate 3-lobed form. Bartram's *Q. hemispherica* is undoubtedly this tree (see Elliott, Sk. 2, 596), but he distinguishes it (Tr. pp. 318, 392, 472, Ed. 1792) from *Q. nigra (aquatica)* and from *Q. phellos* as well as from *Q. laurifolia* (to which he refers as *Q. dentata* "narrow leaved winter green oak"). He seems to have been the first to separate these forms from *Q. nigra*. Michaux (Chênes II) incorrectly refers Bartram's *Q. dentata* and *Q. hemispherica* to forms of *Q. nigra*, notwithstanding that he gives (t. 20, fig. 2) a good figure of *dentata* even showing the clustered buds and lanceolate leaves, broadest when entire (as they are on the slower growing wood) at or near the middle.

This tree is undoubtedly closely related to *Q. laurifolia* as generally understood, but it can be readily separated from it by the leaves of vigorous shoots, which in *Q. laurifolia* are irregularly toothed, while in *Q. obtusa* the margins are entire. The cup also has a very pointed base, while the base of the cup in *Q. laurifolia* is flat. It occurs and is not uncommon along the edges of and in the drier portions of hardwood swamps from southeastern Virginia near McKenney, Dinwiddie Co., southward, being found in the southern part of North Carolina 60 miles inland along the Lumber River in Robeson County. Under the name water oak it is generally planted in coastal towns, as in New Berne and Wilmington, N. C., as a shade tree. *Q. laurifolia* in this section is restricted to the immediate vicinity of the coast and is so strikingly different from *Q. obtusa* oak as to be separated in places by local names.

Quercus leucophylla n. comb., *Q. rubra leucophylla* Ashe (Bul.

Charl. Mus. l. c.). A more careful consideration of this form seems to indicate that its very deeply sinuate sun leaves, the difference in form between the shade and sun leaves and the larger fruit and loose white-oak-like bark are characters which are sufficiently strongly marked and of a constancy to entitle it to specific rank.

✓ *Carya ovalis megacarpa* n. comb. (*C. megacarpa* Sarg. T. & S. 2, 201). An examination of material of *Carya megacarpa* Sarg. from the type locality, Rochester, Monroe County, N. Y., shows that this tree exhibits close affinity to *C. ovalis* (Wang.) Sarg. by having the lower surface of the 5 to 7 leaflets dotted with resinous globules, by having thick, glabrous, red-brown twigs, and short (though larger) ovate and obtuse buds. The only distinguishing characters seem to be in the fruit and buds. The fruit of *C. ovalis* is extremely variable, Dr. Sargent having distinguished four forms, of which the variety *obovatis* approaches *C. megacarpa*. The buds also vary, becoming smaller and inseparable from those of *C. ovalis*, and in a form from the coastal plain of Georgia, a specimen of which has been examined by Dr. Sargent and referred to *C. megacarpa*, both buds and twigs are as slender as in *C. porcina* (Mx.) Nutt.

REVIEWS

Ward & Whipple's Fresh-Water Biology*

This monumental work, to which Professor Ward in particular has devoted many years of investigation as well as editorial supervision over the writings of the other 25 collaborators, is the first attempt of its kind to cover North American fresh-water life in its entirety.

With few exceptions, the various groups of organisms found in fresh waters are treated quite exhaustively, both in their systematic relations as well as in the general details of their anatomy, life history, and biological relations. For the most part, each genus of the various groups is illustrated; while ingenious keys

* Henry Baldwin Ward and George Chandler Whipple, *Fresh Water Biology*. Pp. ix + 1111. 1,547 figures. New York, John Wiley & Sons, 1918. Price \$6.00.